IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicants: Adam Grove et al.	Group Art Unit: 2141
Serial No.: 09/534,321	Examiner: Quang N. Nguyen
Filed: March 24, 2000	Confirmation No.: 2426
Title: Method for High-Performance Delivery of Web Content	Docket No.: 1622285-0002

<u>Certificate of Mailing</u>

I hereby certify that this paper is being deposited with the United States Postal Service as first class mail in an envelope addressed to: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450, on the date below.

Wendi R. Schepler		
Name	Signature	Date

DECLARATION OF THOMAS LYON UNDER 37 C.F.R. § 1.132

I, THOMAS LYON, hereby declare as follows:

1.   I am currently the founder and C.E.O. of Netillion, Inc., an early stage network computing start-up. From 2001 to 2003 I was an independent consultant to the technology and venture capital industries. In 1994 I founded Ipsilon Networks, Inc., which in 1997 was acquired by Nokia Corp. My role at Ipsilon and Nokia was as Chief Technical Officer for the group which produced Internet Routing and Security products. Since early 2001 I have been a member of Netli's Technical Advisory Board.

2.   I have a Bachelor's degree in Electrical Engineering and Computer Science from Princeton University, granted in 1978. Since 1982 I have been involved with the TCP/IP

protocols and the Internet, both as user and developer. My work with Sun Microsystems from 1982 until 1994 covered many, many areas of networking and several contributions from this era live on today in almost every node on the Internet.

3.   I have read and understood the disclosure of U.S. Patent No. 6,141,325 to Gerstel et al. ("Gerstel"). Gerstel discloses a network that includes sub-networks having different topologies and different operating protocols. To select a route through the network, a network controller at a node queries software agents residing at the node to determine the topology of the sub-networks. These agents are written in migrating executable code so that the agents will be able to run on nodes with different operating protocols. Gerstel's invention involves shipment of the agent code across the network. (Gerstel, col. 8, lines 36-37).

4.   I have read and understood the disclosure of U.S. Patent No. 6,415,329 to Gelman et al. ("Gelman"). Gelman discloses a system that includes a source node, a destination node, and a dedicated satellite link between a source gateway and a destination gateway. The invention of Gelman addresses issues due to the high latency of the satellite link. Gelman teaches that the source gateway and destination gateway are oriented in a manner such that each client can only access one gateway. (Gelman, col. 16, lines 12-16).

5.   I have read and understood the disclosure of U.S. Patent No. 6,513,061 to Ebata et al. ("Ebata"). Ebata discloses a proxy server selecting unit that manages proxy servers located on a network and selects a proxy server that is close to a client. The proxy server selecting unit is a dynamic DNS server that manages the location information and load conditions of proxy servers

distributed in the network. When a client requests its DNS server to resolve a domain name into an IP address, the DNS server replies with the IP address of the proxy server selected by the dynamic DNS server as the most proximate to the client.
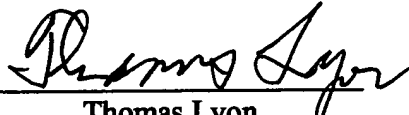
6.   Since Gerstel and Gelman address different problems that are solved in different ways, I would not be motivated to combine the teachings of the references. Gerstel seems to have no applicability to Internet service providers since the notion of mobile agent code is very much at odds with the security concerns; additionally, the Internet does not suffer from the problem of the different operating protocols which the Gerstel solution addresses – all Internet providers use the IP protocol, there is no question of differing address formats. (However, individual providers may layer their IP network above other networks such as ATM & Frame Relay, but these are not visible to the global IP routing problem). The Gerstel approach emphasizes the gathering of information about the network, but says little about how to use that information. This information, in the scale of a network as large as the Internet, would change so often as to perhaps cause far more data to be transmitted about routing than the data required to be routed. Gelman, on the other hand, teaches a useful approach to improving TCP performance in networks with particular data links or transmission media (wireless links) that have high latency or high loss. The Gelman approach implicitly relies on the normal IP network layer routing functions to steer traffic to the link and gateways in question – there is no motivation to seek a separate gateway selection mechanism. In addition Gelman specifically addresses the problems involved with handling all types of IP traffic; so there is no need for application-specific or service-specific gateway selection. Finally, to me, there seems to be little novel work in Gelman,

since work on accommodating traffic over satellite and wireless links has been ongoing since the earliest days of the Internet/Arpanet.

7. Since Gerstel, Gelman, and Ebata address different problems that are solved in different ways, I would not be motivated to combine the teachings of the references. Gerstel addresses interoperability and management problems in a way not applicable to the Internet; Gelman addresses the use of links with unusual characteristics; Ebata addresses the use of DNS to offload a primary server to proxy servers that then provide the service instead of the primary server. Since the kind of offloading in Ebata could only work with services that are easily cached or replicated, it does not apply broadly to all services. So, since Gerstel doesn't address the Internet; Gelman addresses only a small subset of the link types in the Internet, and Ebata addresses a subset of the available services in the Internet, I would not be motivated to combine the teachings.

8. I declare under penalty of perjury under the laws of the United States that the foregoing is true and correct.

Dated: _June 24, 2004_   By: _____
                                        Thomas Lyon